

APPENDIX G TIRE LIFE AND TIRE WEAR FACTORS

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SECTION I. TIRE WEAR FACTORS

The tire wear factors used in this pamphlet are listed in appendix D. The “useful life” of a new tire is the product of Condition Factors (CF) from group A through group E multiplied by the Wheel Position Factor (WPF), and for drive tires only, the Grade Factor (GF). These factors provide a percentage reduction to the maximum tire life. See chapter 2 for tire methodology.

Drive Tires: Useful Tire Life = (CF x WPF x GF)
All Other Tires: Useful Tire Life = (CF x WPF)

EXAMPLE

(Condition Factors, Wheel Position Factors, and Grade Factor
are from GMC Terex Guide.)

Factors are specifically for a rear dump wagon.

<u>Condition Factors (CF):</u>		<u>Average</u>	<u>Severe</u>
A	Maintenance	1.00	1.00
B	Speeds	0.80	0.85
C	Curves	1.00	0.90
D	Surface Condition	0.90	0.70
E	Loads	0.90	0.80
CF	<i>Product of the factors (A x B x C x D x E)</i>	0.65	0.43

Wheel Position Factors (WPF):

WPF-FT	Front Tire (FT)	0.90	0.90
WPF-DTR	Drive Tire (DT) - Rear Dump	0.70	0.70
WPF-TT	Trailing Tire (TT)	1.00	1.00

Grade Factor (GF):

GF	Grade Factor (Drive Tires Only)	0.085	0.75
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SECTION I. TIRE WEAR FACTORS (Continued)

EXAMPLE (Continued)

	<u>Average</u>	<u>Severe</u>
Front Tire - Average = (CF = 0.65)(WPF-FT = 0.90)	0.59	
Front Tire - Severe = (CF = 0.43)(WPF-FT = 0.90)		0.39
Drive Tire - Average = (CF = 0.65)(WPF-DTR = 0.70)(GF = 0.85)	0.39	
Drive Tire - Severe = (CF = 0.43)(WPF-DTR = 0.70)(GF = 0.75)		0.22
Trailing Tire - Average = (CF = 0.65)(WPF-TT = 1.00)	0.65	
Trailing Tire - Severe = (CF = 0.43)(WPF-TT = 1.00)		0.43

SECTION II. MAXIMUM TIRE LIFE

Maximum tire life is used in the formula to determine tire wear cost and is located in appendix F by type of tire.